

**RIVERS AND FLOODS, MARCH, 1912.**

By H. C. FRANKENFIELD, Professor in Charge, River and Flood Division.

The great flood in the lower Mississippi River was still in progress at the end of the month and a report thereon will be issued in the form of a special bulletin in the near future. As anticipated, this flood proved to be the greatest in the history of the lower Mississippi Valley, and it will be some time in June before the last of the flood waters pass into the Gulf.

During the month floods occurred in the rivers of the Atlantic and East Gulf States, the tributaries of the Ohio River in the States of Tennessee, Kentucky, and Indiana, the Grand and Saginaw Rivers of Michigan, the Osage, lower Arkansas, and upper Red Rivers, and in the Missouri River. These floods were mainly moderate in character, except those in western Georgia, Alabama, and Mississippi, which were more or less severe. Descrip-

tions of some of these floods will be found in the appropriate section reports in another portion of this Review. The floods in New England and New York were ice and snow floods with warm although only moderate rains, and the losses amounted to about \$35,000, nearly all of which occurred along the Winooski River of Vermont. The upper Missouri River floods were also caused by the breaking up of the ice.

Hydrographs for typical points on several principal rivers are shown on Chart I. The stations selected for charting are Keokuk, St. Louis, Memphis, Vicksburg, and New Orleans, on the Mississippi; Cincinnati and Cairo, on the Ohio; Nashville, on the Cumberland; Johnsonville, on the Tennessee; Kansas City, on the Missouri; Little Rock, on the Arkansas; and Shreveport, on the Red.